Amendments to the claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-11 (canceled).

12 (previously presented): Process for treating lameness caused by osteoarthrosis, in a non-human animal suffering from osteoarthrosis and not suffering from fractures, comprising the administration, to the non-human animal, of an effective amount of a bisphosphonic acid derivative selected from the group consisting of:

- 1-hydroxyethylidenebisphosphonic acid and its sodium salts;
- 2-pyrid-2-ylethylidenebisphosphonic acid and its sodium salts;
- phenoxymethylenebisphosphonic acid and its salts;
- thiomorpholinomethylenebisphosphonic acid and its salts;
- 4-chlorophenylthiomethylenebisphosphonic acid and its salts;
- 1-hydroxy-2-(3-pyridyl)ethylidenebisphosphonic acid and its sodium salts;
- 1-hydroxy-2-(2-imidazolyl)ethyl-1,1-bisphosphonic acid and its salts; and
- 2-hydroxyethylidene-2-(3-pyridyl)-1,1-bisphosphonic acid and its sodium salts.

13 (previously presented): Process according to claim 12, for treating an animal belonging to the equidae family.

14 (previously presented): Process according to claim 12, for treating a horse.

15 (previously presented): Process according to claim 12, comprising the administration of 0.001 mg/kg to 100 mg/kg of body weight of the bisphosphonic acid derivative.

16 (previously presented): Process according to claim 12, for treating limps in horses, comprising the intravenous administration of 0.01 mg/kg/week to 1 mg/kg/week of tiludronic acid or one of its pharmaceutically acceptable salts.

17 (previously presented): Process according to claim 12, comprising the oral administration of the bisphosphonic acid derivative.

18 (previously presented): Process according to claim 12, comprising the parenteral administration of the bisphosphonic acid derivative.

19 (previously presented): Process according to claim 12, comprising the administration of the bisphosphonic acid derivative in the form of an implant.

20 (previously presented): Process according to claim 12, in which the bisphosphonic acid derivative is 4-chlorophenylthiomethylenebisphosphonic acid.

21 (previously presented): Process for treating lameness caused by osteoarthrosis, in a horse suffering from osteoarthrosis and not suffering from fractures, comprising the administration, to the horse, of an effective amount of 4-chlorophenylthiomethylene-bisphosphonic acid or its sodium salt.

22 (new): Process for treating lameness caused by osteoarthrosis, in a non-human animal suffering from osteoarthrosis and not suffering from fractures, comprising the administration, to the non-human animal, of an effective amount of a bisphosphonic acid derivative selected from the group consisting of:

- 1-hydroxyethylidenebisphosphonic acid and its sodium salts;
- 2-pyrid-2-ylethylidenebisphosphonic acid and its sodium salts;
- phenoxymethylenebisphosphonic acid and its salts;
- thiomorpholinomethylenebisphosphonic acid and its salts;
- 4-chlorophenylthiomethylenebisphosphonic acid and its salts;
- 1-hydroxy-2-(3-pyridyl)ethylidenebisphosphonic acid and its sodium salts;
- 1-hydroxy-2-(2-imidazolyl)ethyl-1,1-bisphosphonic acid and its salts; and

– 2-hydroxyethylidene-2-(3-pyridyl)-1,1-bisphosphonic acid and its sodium salts;

without any increase in bone density being detectable by radiological examination following treatment.